

Filed: February 11, 1997

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

No. 95-2811
(CA-93-158-N)

United States of America ex rel. Pamela A.
Berge,

Plaintiff - Appellee,

versus

The Board of Trustees of the University of
Alabama, et al,

Defendants - Appellants.

O R D E R

The Court amends its opinion filed January 22, 1997, as follows:

On page 3, section 1, line 19 -- the following is added after "Denver, Colorado" and before "for Amici Curiae": Ray Farabee, Vice Chancellor and General Counsel, Dudley R. Dobie, Jr., Office of the General Counsel, THE UNIVERSITY OF TEXAS, Austin, Texas; C. Peter McGrath, President, NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES, Washington, D.C."

On page 8, first full paragraph, line 13 and page 9, first full paragraph, line 22 -- "5 U.S.C." is corrected to read "31 U.S.C."

For the Court - By Direction

/s/ Patricia S. Connor

Clerk

PUBLISHED

UNITED STATES COURT OF APPEALS

FOR THE FOURTH CIRCUIT

UNITED STATES OF AMERICA, ex rel.
PAMELA A. BERGE,
Plaintiff-Appellee,

and

UNITED STATES OF AMERICA,
Intervenor,

v.

THE BOARD OF TRUSTEES OF THE
UNIVERSITY OF ALABAMA; ROBERT F.
PASS, Professor of Pediatrics; SERGIO B.
STAGNO, Professor and Chairman,
Department of Pediatrics; CHARLES A.
ALFORD, Professor of Pediatrics;

No. 95-2811

KAREN B. FOWLER,
Defendants-Appellants.

AMERICAN COUNCIL ON EDUCATION; THE
AMERICAN ASSOCIATION OF STATE
COLLEGES & UNIVERSITIES; THE
NATIONAL ASSOCIATION OF STATE
UNIVERSITIES AND LAND-GRANT
COLLEGES; AMERICAN ASSOCIATION OF
COMMUNITY COLLEGES; COUNCIL OF
GRADUATE SCHOOLS; THE REGENTS OF THE
UNIVERSITY OF MINNESOTA; THE
UNIVERSITY OF TEXAS SYSTEM; THE
UNIVERSITY OF COLORADO; THE REGENTS
OF THE UNIVERSITY OF CALIFORNIA;

THE REGENTS OF THE UNIVERSITY OF
MICHIGAN; ASSOCIATION OF AMERICAN
MEDICAL COLLEGES; EUGENE DONG,
M.D., J.D.; ROBERT L. SPRAGUE, M.D.,
Ph.D.; JEFFREY F. WILLIAMS, B.V.Sc.,
M.R.C.V.S., Ph.D.; TAXPAYERS AGAINST
FRAUD, THE FALSE CLAIMS ACT LEGAL
CENTER,
Amici Curiae.

Appeal from the United States District Court
for the District of Maryland, at Baltimore.
Edward S. Northrop, Senior District Judge.
(CA-93-158-N)

Argued: December 4, 1996

Decided: January 22, 1997

Before ERVIN and WILKINS, Circuit Judges, and MICHAEL,
Senior United States District Judge for the
Western District of Virginia, sitting by designation.

Reversed by published opinion. Judge Ervin wrote the opinion, in
which Judge Wilkins and Senior Judge Michael joined.

COUNSEL

ARGUED: William Allen Bradford, Jr., HOGAN & HARTSON,
L.L.P., Washington, D.C., for Appellants. David Jonathan Fine,
DANGEL, DONLAN & FINE, L.L.P., Boston, Massachusetts, for
Appellee. Michael Eugene Robinson, Appellate Staff, Civil Division,
UNITED STATES DEPARTMENT OF JUSTICE, Washington,

D.C., for Intervenor. **ON BRIEF:** Barbara F. Mishkin, Sarah E. Mitchell, HOGAN & HARTSON, L.L.P., Washington, D.C., for Appellants. Edward T. Dangel, III, Alexander T. Bok, DANGEL, DONLAN & FINE, L.L.P., Boston, Massachusetts, for Appellee. Frank W. Hunger, Assistant Attorney General, Lynne A. Battaglia, United States Attorney, Douglas N. Letter, Appellate Litigation Counsel, Appellate Staff, Civil Division, UNITED STATES DEPARTMENT OF JUSTICE, Washington, D.C., for Intervenor. Richard O. Duvall, John Thorpe Richards, Jr., HOLLAND & KNIGHT, Washington, D.C.; Sheldon Elliot Steinbach, AMERICAN COUNCIL ON EDUCATION, Washington, D.C., for Amici Curiae American Council, et al. Mark B. Rotenberg, General Counsel, Mark A. Bohnhorst, OFFICE OF THE GENERAL COUNSEL, Minneapolis, Minnesota; Elsa K. Cole, General Counsel, UNIVERSITY OF MICHIGAN, Ann Arbor, Michigan; James E. Holst, General Counsel, John F. Lundberg, Christopher M. Patti, UNIVERSITY OF CALIFORNIA, Oakland, California; Charles V. Sweet, University Counsel, Daniel J. Wilkerson, UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER, Denver, Colorado; Ray Farabee, Vice Chancellor and General Counsel, Dudley R. Dobie, Jr., Office of the General Counsel, THE UNIVERSITY OF TEXAS, Austin, Texas; C. Peter McGrath, President, NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES, Washington, D.C., for Amici Curiae Regents of the University of Minnesota, et al. Robert A. Burgoyne, Cristina C. Chou, FULBRIGHT & JAWORSKI, L.L.P., Washington, D.C.; Joseph A. Keyes, Jr., ASSOCIATION OF AMERICAN MEDICAL COLLEGES, Washington, D.C., for Amicus Curiae Association. Eugene Dong, Palo Alto, California, for Amici Curiae Dong, et al. Priscilla R. Budeiri, Gary W. Thompson, Lisa R. Hovelson, TAXPAYERS AGAINST FRAUD, THE FALSE CLAIMS LEGAL CENTER, Washington, D.C., for Amicus Curiae Taxpayers.

OPINION

ERVIN, Circuit Judge:

Defendants-Appellants appeal from a denial of their motion for judgment as a matter of law following a jury verdict awarding the United States, after trebling and the imposition of a civil penalty, \$1.66 million, 30% of which (\$498,000) is to be awarded to Relator-Appellee Pamela A. Berge (Berge), on a False Claims Act claim, and awarding Berge \$265,000 in compensatory and punitive damages on

a pendent state law claim for conversion of intellectual property. We reverse.

I.

At the time the events at issue occurred, Pamela Berge was a doctoral candidate in nutritional sciences at Cornell University. The individual Defendants-Appellants Sergio Stagno, Charles Alford, and Robert Pass were medical researchers and professors at Defendant-Appellant The University of Alabama at Birmingham (UAB). Defendant-Appellant Karen Fowler was a doctoral candidate at UAB supervised by Pass.

Scientists at UAB have been studying cytomegalovirus (CMV), the most common infectious cause of birth defects, since 1971, and over the years have accumulated the leading database on maternal and congenital CMV in the world. A significant part of the funding for this research has been provided by grants from the National Institutes of Health (NIH), in particular grant HD-10699, "Perinatal Infections, Immunity and Maldevelopment Research Program Project," administered by NIH's National Institute of Child Health and Human Development (NICHD). This grant is renewable every five years, with years 11 to 15 relevant to this case. Alford was the principal investigator for this project, although Stagno and Pass were closely associated with it. All three are internationally recognized as leading authorities on CMV.

Berge decided to do her dissertation on CMV as a possible cause of low birth weight. She arranged access to and extensive assistance with UAB's database through Stagno, and she worked closely with Stagno and his colleagues while she was in residence as a visiting graduate student at UAB from February to August 1987. After Berge returned to Cornell, she resisted others' attempts to use the collected data and began to complain about Cornell faculty members, including her thesis chairman. She made three further trips to Birmingham during which she made presentations of her work. She completed her thesis in May 1989 and received her Ph.D. Berge thereafter attempted to publish papers based on her thesis, but she was rejected repeatedly by Journal of the American Medical Association, Epidemiology, and Journal of Infectious Diseases.

In the meantime, Defendant-Appellant Fowler decided in June 1988 to do her dissertation on the relationship between CMV and sexually-transmitted diseases and began working with Pass. After Fowler had begun her data analysis, based in part on UAB's existing database and in part on original medical records, she consulted completed theses, including Berge's, to choose a format. She defended her dissertation in May 1990. The following month, Fowler presented her research at a meeting of the Society of Epidemiological Research. Berge was in the audience and became shocked at what she considered to be plagiarism of her own work by Fowler.

Berge brought her allegations to Stagno's attention but did so in such a way that ultimately Stagno and his colleagues determined they could no longer collaborate with her. Two investigations of the allegations were conducted at UAB, but the allegations were found to be baseless. Unsatisfied with these results, as well as those produced from the other avenues she pursued, Berge next obtained copies of UAB's grant applications through a Freedom of Information Act (FOIA) request and then brought this litigation.

As the basis for her qui tam action under the False Claims Act, 31 U.S.C. §§ 3729-3733, Berge alleged that UAB had made false statements to NIH in its annual progress reports under its grant. In particular, these false statements were that (1) UAB misled NIH in year 11 about the amount of data that had been computerized; (2) UAB had included an abstract of Berge's work in year 12 without mentioning her name, thereby overstating UAB's competence and progress in epidemiology; (3) UAB, although including Berge's name on the abstracts in years 13 and 14, had "submerged" her research so that serious questions about one of UAB's central theses would not be noticed; and (4) UAB misled NIH in year 15 by including abstracts of Fowler's work which plagiarized Berge's. Although Berge also alleged a number of pendent state law claims, only the conversion of intellectual property is at issue on this appeal.

After this action was filed, the government naturally investigated to determine whether it would choose to prosecute the matter on its own behalf. The Office of the Inspector General (OIG) of the Department of Health and Human Services conducted such an investigation and recommended that no action be taken. Its report stated:

This investigation, which has involved the interview of NICHD grant officials, interview of University officials, and the examination of documents of relator, NICHD and the University of Alabama, has found no evidence that the subjects committed a criminal violation in connection with grant applications or progress reports submitted to the Government. Information has been obtained however, which shows many of the assumptions behind the relator's allegations to be in error or exaggerations of the truth.

J.A. at 179 (emphasis added). The government accordingly declined to become involved in the litigation below pursuant to 31 U.S.C. § 3730. This OIG report was never submitted into evidence at trial. The parties make various contentions as to why this is so and whether the district court abused its discretion in failing to allow it. Given our disposition of this case, we do not reach this issue.

After a ten-day jury trial, the jury returned a verdict in favor of Berge, finding False Claims Act liability against all defendants except Fowler but assessing damages only against UAB in the amount of \$550,000. Pursuant to 31 U.S.C. § 3729(a), this amount was trebled to \$1.65 million, and the district court imposed a civil fine of \$10,000 against all the defendants, jointly and severally, except Fowler. Pursuant to § 3730(d)(2), the district court awarded Berge as relator 30% of the United States' total recovery, or \$498,000. The jury also found the four individual defendants liable for conversion of intellectual property in differing amounts, imposing a total of \$50,000 in compensatory damages and \$215,000 in punitive damages. The district court, without opinion, denied defendants' motions for judgment as a matter of law and a new trial. This appeal followed.

II.

Berge instituted the action below under the False Claims Act, 31 U.S.C. §§ 3729-3733. Subject matter jurisdiction of the district court was thus based on the federal question statute, 28 U.S.C. § 1331. Supplemental jurisdiction over the pendent state law claims was pursuant to 28 U.S.C. § 1367. This appeal arises from a final judgment below, and thus we possess appellate jurisdiction under 28 U.S.C. § 1291.

Normally that would end our jurisdictional inquiry, but the defendants and various amici raise issues concerning the constitutionality of the False Claims Act, whether qui tam relators possess standing, and whether state instrumentalities can be held liable pursuant to the Act under the Eleventh Amendment, especially in light of Seminole Tribe v. Florida, 134 L. Ed. 2d 252 (1996). None of these issues were raised below, but to the extent they partake of jurisdictional matters, we may properly consider them. Because we reverse on the facts of this case, we naturally see no need to reach the issue of the constitutionality of the Act itself. We do, however, briefly address why we consider the general issue of standing to be unproblematic, why the government, as the real party in interest, possesses standing under the facts of this case, and why Seminole does not change our view that Eleventh Amendment immunity is a red herring in these circumstances.

We have previously held that the "United States is the real party in interest in any False Claims Act suit, even where it permits a qui tam relator to pursue the action on its behalf." United States ex rel. Milam v. University of Tex. M.D. Anderson Cancer Ctr., 961 F.2d 46, 50 (4th Cir. 1992). Although Milam arose in the pre-Seminole context of a claim of Eleventh Amendment immunity, which was denied since states may be sued in federal court by the United States, we see Milam as resolving the general issue of standing in this circuit. The Seventh Circuit has concluded that "[o]nce we accept the premise that the United States is the real plaintiff in a qui tam action, it stands to reason that challenges to the standing of the government's representative are beside the point." United States ex rel. Hall v. Tribal Dev. Corp., 49 F.3d 1208, 1213 (7th Cir. 1995). Similarly, the Ninth Circuit has analyzed extensively whether the qui tam provisions of the False Claims Act conflict with Article III or violate the principle of separation of powers, the Appointments Clause, or the Due Process Clause, points which various amici raise again here, and our sister circuit concluded they do not. United States ex rel. Kelly v. Boeing Co., 9 F.3d 743, 747-60 (9th Cir. 1993), cert. denied, 510 U.S. 1140 (1994). That court has recently affirmed its rejection of these same arguments in United States ex rel. Schumer v. Hughes Aircraft Co., 63 F.3d 1512, 1520-21 (9th Cir. 1995), cert. granted in part, 117 S. Ct. 293 (U.S. Oct. 15, 1996), and we note that the Supreme Court has granted certiorari to consider, inter alia, whether the lower courts

erred "in asserting jurisdiction over this action under qui tam provisions of FCA." 65 U.S.L.W. 3283, 3292 (U.S. Oct. 15, 1996).

Although we would not hazard to predict what the Supreme Court may do in Schumer or whether it will even reach the question on which certiorari was granted, given that our disposition reverses the liability of the defendants in toto, we decline to enter into a long disquisition on the standing issue.

However, it must be admitted that, notwithstanding a qui tam relator's general standing as the government's representative, the government, as the real party in interest, must still have suffered an injury in fact. See Lujan v. Defenders of Wildlife, 504 U.S. 555 (1992). Amicus Association of American Medical Colleges contends that Berge lacks standing because the United States suffered no injury in fact, as evidenced by the OIG report. We find this argument meritless. In the first place, the OIG report was more concerned with possible criminal violations, which would put the Government to a higher burden of proof than in a civil action as here. Second, and most importantly, the plain language of the Act clearly anticipates that even after the Attorney General has "diligently" investigated a violation under 31 U.S.C. § 3729, the Government will not necessarily pursue all meritorious claims; otherwise there is little purpose to the qui tam provision permitting private attorneys general. Cf. id. at § 3730(a) ("If the Attorney General finds that a person has violated or is violating section 3729, the Attorney General may bring a civil action under this section against the person." (emphasis added)) with id. at § 3730(c)(3) ("If the Government elects not to proceed with the action, the person who initiated the action shall have the right to conduct the action." (emphasis added)); see also United States ex rel. McGough v. Covington Techs. Co., 967 F.2d 1391, 1397 (9th Cir. 1992) (stating that "[t]o hold that the government's initial decision not to take over the qui tam action is the equivalent of its consent to a voluntary dismissal of a defendant with prejudice would require us to ignore the plain language of § 3730(b)(1)"). The OIG report is not an admission by the United States that it has suffered no injury in fact, but rather it amounts to a cost-benefit analysis. Here the Government surmised--and, as we decide this case, it turns out rightly--that the costs of proceeding on Berge's claims outweighed the anticipated benefits. Finally, we note that injury in fact is not to be judged post hoc. The logical outcome of amicus's position is that any losing plaintiff-

relator would not have possessed standing in the first place. In this context, it is worth noting that the district court determined in a lengthy memorandum that Berge's allegations of false statements were sufficient to overcome a motion for summary judgment. See United States ex rel. Berge v. Board of Trustees of the Univ. of Ala., Civil No. N-93-158 (D. Md. filed Mar. 14, 1995), at 9-14.

As a final jurisdictional matter, we recognize that no court has yet considered the interposition of the Eleventh Amendment to the False Claims Act in the wake of Seminole. Amici Regents of the University of Minnesota et al. make an interesting case that the False Claims Act was not intended to apply to the states, which they think takes on added significance post-Seminole. Amici American Council on Education et al. also suggest we need to take another look at Eleventh Amendment immunity in the qui tam context. We disagree. Seminole's relevant holding here is its reconfirmation that Congress must use unequivocal statutory language if it intends to abrogate the sovereign immunity of states in suits brought by and for private parties. Seminole, 134 L. Ed. 2d at 266. But as we already said in Milam, this is a non-issue in the False Claims Act context. Milam, 961 F.2d at 50 n.3. There is simply no question of abrogation of immunity here. Seminole certainly left intact what is beyond purview: that the federal government may sue states in federal court. Seminole, 134 L. Ed. 2d at 276 n.14 (citing United States v. Texas, 143 U.S. 621, 644-45 (1892), for the proposition that such power is necessary to the "permanence of the Union"); see also West Virginia v. United States, 479 U.S. 305, 311 (1987). The United States is the real party in interest. The Act itself states that the "action shall be brought in the name of the Government." 31 U.S.C. § 3730(b)(1). We affirm our reasoning in Milam: "[T]he states have no Eleventh Amendment immunity against the United States ab initio. Therefore, there is no reason Congress would have displaced it in the False Claims Act." Milam, 961 F.2d at 50 n.3.

III.

Turning to the merits, appellants assign at least seven points of error to the district court below. We reach only three of them in reversing the entire judgment below: the lack of materiality to the government's funding decisions of the alleged false statements; the

insufficiency of the evidence that appellants even made false statements to the government, as merged into the first issue on the False Claims Act claim; and the preemption, by federal copyright law, of the state law conversion of intellectual property claim.¹ We address the materiality and insufficiency of evidence issues in this section and the preemption issue in the next section.

The civil False Claims Act provides in relevant part:

(a) Any person who--

(2) knowingly makes, uses, or causes to be made or used, a false record or statement to get a false or fraudulent claim paid or approved by the Government; . . .

is liable to the United States Government for a civil penalty of not less than \$5,000 and not more than \$10,000, plus 3 times the amount of damages which the Government sustains because of the act of that person

31 U.S.C. § 3729(a). We have previously suggested that the civil False Claims Act requires a materiality element. See United States v. Snider, 502 F.2d 645, 652 n.12 (4th Cir. 1974) (construing the FCA's predecessor statute, 31 U.S.C. § 231). If previously unclear, we now make explicit that the current civil False Claims Act imposes a materiality requirement. See also Tyger Constr. Co. v. United States, 28 Fed. Cl. 35, 55 (1993) ("[T]he FCA covers only those false statements that are material.").

On this materiality issue, however, we must initially determine whether the issue is to be properly decided by the court. In the context of the criminal false statements statute, 18 U.S.C. § 1001, we had previously held that materiality is a question of law whose test is

¹ The other four assignments of error are that the district court failed to set aside a flawed damages award on the False Claims Act claim since the verdict was inconsistent, the court abused its discretion by excluding the OIG report, the court erred in its instructions on the state law claim, and there was insufficient proof of conversion.

"whether the false statement has a natural tendency to influence agency action or is capable of influencing agency action." United States v. Norris, 749 F.2d 1116, 1122 (4th Cir. 1984) (citations omitted), cert. denied, 471 U.S. 1065 (1985). In the criminal context, that holding can no longer stand as a result of United States v. Gaudin, 132 L. Ed. 2d 444 (1995). In Gaudin, a unanimous Court held that the materiality of false statements was an element of the crime under 18 U.S.C. § 1001 to which a defendant has a constitutional right under the Fifth and Sixth Amendments for a jury to determine guilt beyond a reasonable doubt. Id. at 458. Berge's expansive interpretation that Gaudin's rationale must apply even in civil cases where there is a right to jury trial under the Seventh Amendment is unwarranted. The Court expressly declined to reach that issue, stating that "the courts' power to resolve mixed-law-and-fact questions in civil cases is not at issue here; civil and criminal juries' required roles are obviously not identical, or else there could be no directed verdicts for civil plaintiffs." Id. at 454; see also id. at 460 (stating that the "Court properly acknowledges that other mixed questions of law and fact remain the proper domain of the trial court") (Rehnquist, C.J., concurring). Moreover, the Court refused to overrule its unanimous opinion in Kungys v. United States, 485 U.S. 759 (1988), a civil denaturalization case, that the "materiality requirement under . . . statutes dealing with misrepresentations to public officers" is one for the court,² id. at 772 (citations omitted), since the constitutional ramifications were different. Gaudin, 132 L. Ed. 2d at 458.

In addition, we have already indicated our reluctance to construe Gaudin broadly. See, e.g., United States v. Daughtry, 91 F.3d 675, 675 (4th Cir. 1996) (stating that "Gaudin held only that in prosecutions for violations of [18 U.S.C.] § 1001, the element of materiality must be submitted to the jury" (emphasis added)); see also United States v. Klausner, 80 F.3d 55, 61 (2d Cir. 1996) (holding that even in some criminal contexts materiality remains a purely legal question after Gaudin). Thus, in light of our earlier determination that the materiality of false statements is a legal question and of our inclination not to give an expansive interpretation to Gaudin, we hold that in the context of the civil False Claims Act the determination of mate-

² Although the Court was split on the judgment, the Court was unanimous in the opinion that materiality was a question for the court.

riality, although partaking of the character of a mixed question of fact and law, is one for the court. See also United States ex rel. Butler v. Hughes Helicopter Co., No. CV 89-5760 SVW, 1993 U.S. Dist. LEXIS 17844, at *43-44 (C.D. Cal. Aug. 25, 1993) (holding that the materiality of false statements under the False Claims Act is a legal question for the court), aff'd on other grounds, 71 F.3d 321 (9th Cir. 1995). Moreover, we see no reason to depart from the test we enunciated in Norris, even though the remainder of its holding cannot stand post-Gaudin, that is, the materiality of the false statement turns on "whether the false statement has a natural tendency to influence agency action or is capable of influencing agency action." Norris, 749 F.2d at 1122; see also Kungys, 485 U.S. at 770 (recognizing that a "misrepresentation is material if it has a natural tendency to influence, or was capable of influencing, the decision of the decisionmaking body to which it was addressed" (internal quotation marks omitted)).

In any event, even the Gaudin Court acknowledged that there always remains as a threshold question of law whether the case for materiality is "so weak that no reasonable juror could credit it." Gaudin, 132 L. Ed. 2d at 454. In the instant case, our de novo review, see, e.g., Benedi v. McNeil-P.P.C., Inc., 66 F.3d 1378, 1383 (4th Cir. 1995) ("We review a denial of a motion for judgment as a matter of law de novo." (citation omitted)), of the alleged false statements plainly shows they were not material to NICHD's funding decisions, and, furthermore, are so lacking in materiality, indeed, are not even false, that no reasonable jury could have so found.

As a general matter, NICHD's program officer with responsibility for UAB's grant testified that Berge's contributions were not central to UAB's project and that the progress reported by UAB was satisfactory for a recommendation of continued funding without Berge's contribution. As even the government notes in its brief as intervenor on appeal, "NICHD determined that the information Berge alleged was false or misrepresented was not material to its funding decisions." Br. of United States as Intervenor at 34.

More particularly, Berge's assertion of UAB's alleged misstatement concerning the extent of computerization in year 11 is belied by the fact that information on upwards of 20,000 patients had been computerized by that time. Even accepting Berge's assertion that only 124

cases of congenitally-infected babies were computerized, that fact is irrelevant to the greater computerization effort, and, moreover, is one fully consistent with Berge's own dissertation claim that congenital infection affects only 0.2%-2.4% of all live births. Furthermore, the program officer testified that the principal purpose of the project was the collection of data, not its computerization. Thus, not only did UAB not mislead NIH about the extent of computerization, but UAB fully reported the number of subjects of the project every year and thereby complied with NIH's expectation on the collection of data. In fact, the program officer stated that UAB's data collection "is considered to be the largest single source of information on maternal and congenital CMV in the world." J.A. at 1510.

Second, the year 12 omission of Berge's name from an abstract submitted as part of the progress report cannot possibly be material. In the first place, NIH did not even require the inclusion of her name, or anyone's name. There can only be liability under the False Claims Act where the defendant has an obligation to disclose omitted information. United States ex rel. Milam v. Regents of the Univ. of Calif., 912 F. Supp. 868, 883 (D. Md. 1995). More importantly, the abstract itself was included, and was required to be included, because Stagno appeared on the abstract as a co-author. Berge expended considerable effort in attempting to convince us, both in her briefs and at oral argument, that the jury properly found this failure to attribute the abstract to her and obtain her permission to use it was a material false statement. The report, in fact, did not attribute the abstract to any of its authors; it simply "abstracted" the study for the purpose of reporting on project activity. Under federal copyright law, Stagno, as co-author, is a coowner of copyright in the work. See 17 U.S.C. § 201(a). Coowners are treated as tenants in common with each coowner having an undivided, independent right to use the work, subject only to a duty of accounting for profits to other coowners. See H.R. Rep. No. 1476, 94th Cong., 2d Sess., at 121 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5736; Erickson v. Trinity Theatre, Inc., 13 F.3d 1061 (7th Cir. 1994). Thus it was perfectly proper for Stagno to use the abstract as he did, and that use therefore is not a false statement, let alone a material one capable of affecting NIH's funding decision.

Third, Berge's claim of the "submergence" of her work in the progress reports for years 13 and 14 is inexplicable. In each year's prog-

ress report, fully half of the discussion of activity under Specific Aim #1 of Project 1 is given over to quoting in full from Berge's abstracts, with attribution. If Berge's work supported the hypothesis that there was a downside risk to a live vaccine, the development of which she claims was a central goal of UAB's project, then it was incumbent upon her to note that implication in her work, which she did not. The omission is her own fault, not UAB's. An ex post facto realization of the possible importance of this implication cannot support a charge of falsity at the time the report was submitted. Moreover, NIH's expectation that only the abstract would be included in the progress report cannot form the basis for liability for an omission in any event. While it is true that the reports mistakenly referred to Berge as a "postdoctoral graduate student from the Department of Biostatistics" at Cornell, see J.A. at 1188, 1202, when, in fact, she was in year 13 a doctoral candidate in nutritional sciences and by year 14 had obtained her Ph.D., no reasonable jury could conclude that such trivial errors were materially capable of influencing NIH's funding decision.

As to Berge's final asserted false statement by UAB, that NIH was misled by including an abstract of Fowler's work in year 15, which allegedly plagiarized Berge's own work and about which plagiarism UAB knew, the evidence is patently clear that there was no plagiarism by Fowler and thus no false statement by UAB. The government itself points out that "none of the scientific or administrative bodies to which [Berge] complained found that Fowler had plagiarized Berge's work." Br. of United States as Intervenor at 5. As Berge herself concedes, "Ms. Fowler's ultimate hypothesis and conclusions were different from [mine]." Br. of Appellee at 19. But if the hypothesis and conclusions were different, what was plagiarized? Certainly not independently-obtained data sets extracted from UAB's own collection; nor the case control method, one of the most frequently-used research designs in epidemiology; nor the textbook statistical methodologies employed; nor the risk factors, derived from the scientific literature, commonly used in perinatal studies; nor even the organization of Fowler's and Berge's tables which do nothing more than reflect UAB's own clinic forms. None of these "ideas" were original to Berge, and thus none of these could have been taken by Fowler from Berge and passed off as her own. The ideas that were original to Berge were her hypotheses and conclusions concerning the relationship between CMV infection and low birth weight, but these ideas are

concededly different from Fowler's hypotheses and conclusions concerning the relationship between sexually-transmitted diseases and maternal CMV infection. As the Public Health Service's Office of Research Integrity has determined, plagiarism does not include credit disputes. See 3 ORI Newsletter 3 (Office of Research Integrity, U.S. Public Health Service, Dec. 1994). But once the surface is scratched, there is nothing to Berge's claim except her complaint that Fowler did not give Berge's work the notice she felt she deserved. If that be scientific misconduct, it is far too attenuated to any federal right for us, or any federal court, to decide.

Berge also makes much of the fact that the year 15 review had to be performed three times before UAB could allegedly get its grant renewed. Indeed, she claims it is "difficult to imagine a more concrete demonstration of the materiality of the false statements." Br. of Appellee at 29. However, the record clearly shows that the first review had to be rejected because of a conflict of interest by one of the reviewing scientists, and the second had to be rejected because it impermissibly had access to the first review. The third review was thus the only clean review, and it recommended funding the project. Thus Berge's most concrete demonstration of materiality rests on no foundation whatsoever.³

In addition to this allegation by allegation analysis that demonstrates the lack of materiality, as well as the lack of falsity, of the statements, we also decide that no reasonable jury could possibly conclude that a multi-million dollar grant, continually renewed over a period of more than a decade, undertaken by three internationally-respected scientists engaged, in part, in the collection of the world's leading database on CMV, would be reduced or eliminated due to UAB's lack of expertise in an area that could only be bolstered by the work of an unknown graduate student in nutritional sciences--work that, when reviewed by independent scientists at peer-reviewed journals, was determined to be "scarcely comprehensible," J.A. at 1489, "extremely difficult to read and even more difficult to evaluate," J.A. at 1486, and so cavalier in its design and conduct as to induce great

³ Moreover, Berge totally ignores the fact that, at the time of trial, well after all of Berge's allegations had been repeatedly probed, NIH continued to fund UAB under the grant.

skepticism in "any findings reported from it," J.A. at 1489. The hubris of any graduate student to think that such grants depend on the results of her work is beyond belief. That is not the way Big Science works. Assuming arguendo that all of Berge's allegations were true and UAB had made these false statements, it is hard to imagine that NIH's decision-making would have been influenced by them.

Reviewing all this evidence in the light most favorable to Berge, it is abundantly clear that substantial evidence upon which the jury could have found for Berge is lacking. See Benedi v. McNeil-P.P.C., Inc., 66 F.3d 1378, 1383 (4th Cir. 1995) (citation omitted). Her evidence amounts at most to a scintilla, which is insufficient to sustain the verdict. See Trandes Corp. v. Guy F. Atkinson Co., 996 F.2d 655, 660 (4th Cir.), cert. denied, 510 U.S. 965 (1993). At best, Berge fails on her burden of showing materiality; at worst, she cannot even show the statements were false. In either case, judgment as a matter of law is appropriate for appellants on the False Claims Act claim since Berge has "failed to make a showing on an essential element of [her] case with respect to which [s]he had the burden of proof." Singer v. Dungan, 45 F.3d 823, 827 (4th Cir. 1995) (internal quotation marks and citation omitted). We reverse the judgment below on the False Claims Act claim in its entirety.

IV.

We turn now to the claim of conversion of intellectual property under Alabama law. The Alabama conversion statute provides:

The owner of personalty is entitled to possession thereof.
Any unlawful deprivation of or interference with such possession is a tort for which an action lies.

Ala. Code § 6-5-260. Whether federal copyright law preempts a state law claim is a question of law that we review de novo. Rosciszewski v. Arete Assocs., Inc., 1 F.3d 225, 229 (4th Cir. 1993).

Berge's conversion claim in this instance is clearly preempted by federal copyright law. Section 301(a) of the Copyright Act provides in pertinent part:

[A]ll legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright as specified in section 106 in works of authorship that are fixed in a tangible medium of expression and come within the subject matter of copyright as specified by sections 102 and 103 . . . are governed exclusively by this title.[After January 1, 1978], no person is entitled to any such right or equivalent right in any such work under the common law or statutes of any State.

17 U.S.C. § 301(a). We have recently held that the statute thus sets up a two-prong inquiry to determine when a state law claim is preempted: first, the work must be "within the scope of the 'subject-matter of copyright' as specified in 17 U.S.C. §§ 102, 103," and second, "the rights granted under state law" must be "equivalent to any exclusive rights within the scope of federal copyright as set out in 17 U.S.C. § 106." Rosciszewski, 1 F.3d at 229 (quotation marks and citation omitted).

There can be no doubt that Berge's work--her dissertation, to which she herself affixed a copyright mark; her abstracts; her drafts, etc.--falls within the scope of the subject-matter of copyright. All of these written works are clearly "original works of authorship fixed in a [] tangible medium of expression." 17 U.S.C. § 102(a). Berge's argument that her conversion claim is not preempted because it is her "ideas and methods," which are specifically excluded from copyright protection, see id. at § 102(b), that have been converted rests on a fallacious interpretation of the Copyright Act. In other words, Berge wants to argue that ideas embodied in a work covered by the Copyright Act do not fall within the scope of the Act because the Act specifically excludes them from protection. But scope and protection are not synonyms. Moreover, the shadow actually cast by the Act's preemption is notably broader than the wing of its protection.

The second prong of the preemption test is satisfied unless there is an "extra element" that changes the nature of the state law action so that it is "qualitatively different from a copyright infringement claim." Rosciszewski, 1 F.3d at 229-30 (emphasis in original) (internal quotation marks and citation omitted); see also Trandes Corp. v. Guy F. Atkinson Co., 996 F.2d 655, 659-60 (4th Cir.), cert. denied, 510 U.S.

965 (1993). It is hornbook law that a "state law action for conversion will not be preempted if the plaintiff can prove the extra element that the defendant unlawfully retained the physical object embodying plaintiff's work." Paul Goldstein, *Copyright, Patent, Trademark and Related State Doctrines* 777 (3d ed. 1993) (quoting Paul Goldstein, *Copyright* (1989)); see also Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 1.01[B](1)(i) (1995) ("The torts of conversion and trespass relate to interference with tangible rather than intangible property . . ."). However, § 301(a) will preempt a conversion claim "where the plaintiff alleges only the unlawful retention of its intellectual property rights and not the unlawful retention of the tangible object embodying its work." Goldstein, supra, at 777; see Dielsi v. Falk, 916 F. Supp. 985, 992 (C.D. Cal. 1996) (holding that a claim for conversion of a television script was preempted since there was no extra element to the essential claim that the ideas were misappropriated); compare Patrick v. Francis, 887 F. Supp. 481, 482, 484 (W.D.N.Y. 1995) (holding a conversion claim preempted where the action actually sought to recover for unauthorized copying of the work, concepts, and ideas of a research paper), with Oddo v. Reis, 743 F.2d 630, 635 (9th Cir. 1984) (conversion of tangible property not preempted). It could hardly be clearer that Berge's conversion claim is preempted. We have already dismissed Berge's argument that her "ideas and methods" are not within the scope of copyright's protection or preemption as to the first prong. See supra. As to the second prong, what is crucial is that Berge makes no claim that appellants converted any tangible objects embodying her intellectual property.

Berge attempts to salvage her conversion claim first by claiming that Alabama recognizes the conversion of intangible property and, second, by claiming that the extra element is unauthorized use.⁴ She

⁴ We summarily reject Berge's additional arguments that the extra element in this conversion claim may be supplied by (1) the severe harm she suffered as a result of appellants' alleged "scooping" of her work, i.e. publishing her ideas before she could do so herself, that in turn led to the rejection of her work by academic journals and thence to the ruin of her career, and (2) breach of trust in her relationship with Stagno. We find these to be facially implausible as extra elements to a conversion of intellectual property claim in these circumstances. Berge cites no authority for the proposition that severity of harm has any effect on copyright pre-

must founder on both attempts. Although the Alabama Supreme Court has held that "[i]n appropriate circumstances, intangible personal property can be converted," National Sur. Co. v. Applied Sys., Inc., 418 So.2d 847, 850 (Ala. 1982), it was a specific computer program that was converted there, at a time when the manner of the applicability of copyright law to computer programs was unclear. If National Surety holds only that intellectual property may be converted in particular circumstances, then it is unexceptional. However, if it holds that such intellectual property can be converted without an extra element beyond copyright infringement, then it must be repudiated as contrary to the Copyright Act under the Supremacy Clause.

Perhaps recognizing the weakness of that reed, Berge also grasps onto G.S. Rasmussen & Assocs. v. Kalitta Flying Serv., 958 F.2d 896 (9th Cir. 1992), cert. denied, 508 U.S. 959 (1993). But Kalitta only held that a conversion claim did not run afoul of copyright preemption where an unauthorized copy of a Supplemental Type Certificate from the Federal Aviation Administration had been used improperly

emption. We decline to erode the preemption provisions of the Copyright Act. The evidence is abundantly clear that Berge's work did not merit publication on the basis of its quality alone, notwithstanding any possibility that she had been "scooped."

To support her claim that breach of trust provides the extra element, Berge cites Sargent v. American Greetings Corp., 588 F. Supp. 912 (N.D. Ohio 1984). But Sargent held only that a claim for breach of confidential relationship was not preempted by the Copyright Act, not that a claim qualitatively the same as a copyright infringement claim could be made into one qualitatively different from it if it involved a breach of confidential relationship. Id. at 923-24. The tort for breach of confidential relations involves a wholly different proof scheme than the tort of conversion, and Berge was not required for purposes of her conversion claim to show any such breach, nor did she. Cases that find breach of trust important are ones involving claims whose core consists of a breach --such as trade secret cases--and cases where the cause of action requires that breach of confidentiality or the like be shown. See, e.g., Avtec Sys., Inc. v. Peiffer, 21 F.3d 568, 574 (4th Cir. 1994); Rosciszewski, 1 F.3d at 230; Bateman v. Mnemonics, Inc., 79 F.3d 1532, 1549 (11th Cir. 1996); Data General Corp. v. Grumman Sys. Support Corp., 36 F.3d 1147, 1164-65 (1st Cir. 1994).

to obtain an airworthiness certificate from the FAA. Id. at 904. In distinguishing Kalitta, the Fifth Circuit properly recognized in Daboub v. Gibbons, 42 F.3d 285 (5th Cir. 1995), that where the core of the state law theory of recovery, as in conversion, goes to wrongful copying, in its case, the plagiarism of an entire song, it is preempted. Id. at 289. Recognizing the broad and absolute preemption of § 301, "stated in the clearest and most unequivocal language possible, so as to foreclose any conceivable misinterpretation of its unqualified intention that Congress shall act preemptively, and to avoid the development of any vague borderline areas between State and Federal protection," H.R. Rep. No. 1476, 94th Cong., 2d Sess. (1976) reprinted in 1976 U.S.C.C.A.N. 5659, 5746, the Daboub court concluded that "if the language of the act could be so easily circumvented, the preemption provision would be useless, and the policies behind a uniform Copyright statute would be silenced." Id. at 290 & n.8. Berge's charge of plagiarism and lack of attribution can only amount to, indeed, are tantamount to, a claim of copyright infringement, for Berge has certainly not been prevented from using her own ideas and methods. See Garrido v. Burger King Corp., 558 So.2d 79, 82 (Fla. Dist. Ct. App. 1990) (holding that where the gravamen of a conversion claim was the unauthorized taking or use of ideas, the elements of the claim were not qualitatively different from copyright infringement).

Berge complains that if the Copyright Act's idea-expression dichotomy, see 17 U.S.C. § 102(b), and § 301's preemption provision be read this way, then there is "no legal remedy for the theft of [my] intellectual property. Intellectual property which can be stolen without fear of legal punishment ceases to be property." Br. of Appellee at 41. But what Berge fails to realize is that, as a general proposition, ideas are simply part of the public domain. See, e.g., Hoehling v. Universal City Studios, Inc., 618 F.2d 972, 979-80 (2d Cir.) (holding that, in non-fiction works, since facts, themes, and research "have been deliberately exempted from the scope of copyright protection to vindicate the overriding goal of encouraging contributions to recorded knowledge, the states are pre-empted from removing such material from the public domain"), cert. denied, 449 U.S. 841 (1980); see also Nimmer and Nimmer, supra, at § 16.01 (stating that "[t]he concept that ideas are 'free as air' is of ancient origin, and is well rooted in our jurisprudence" (footnotes omitted)). It is not that this form of

intellectual property ceases to be property, rather it is just not intangible personalty. See, e.g., Richter v. Westab, Inc., 529 F.2d 896, 902 (6th Cir. 1976) ("The law does not favor the protection of abstract ideas as the property of the originator."). Berge wants to fence off the commons, but the only part she may rightly claim is the original expression of her ideas fixed in a tangible medium. The law recognizes her stake there and accords it copyright protection.

Berge's conversion claim is preempted by federal copyright law. We therefore reverse the judgment below on this claim in its entirety.

V.

For the foregoing reasons, we hold that the district court erred when it improperly denied appellants' motion for judgment as a matter of law, both as to Berge's False Claims Act claim and to her conversion claim. The judgment of the district court is therefore

REVERSED.